





# Active Directory DS in AWS

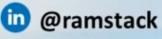
Ramaswamy Arunachalam | 06-Sep-2023



## My Intro

- Based out of Wellington
- Solution Architect
- Passionate About:
  - 🝊 Cricket | 🛲 F1 | 🙎 Superhero Movies | 🧏 Dog Lover.









### Why Active directory is essential in AWS Universe?

- Ensure consistent user experience in Hybrid environment.
- Support Windows work load with authentication.
- Integrate with AWS applications & services.
- High speed, reliable & low latency to applications.



#### AD deployment Options in AWS





We can choose Self-Managed AD when

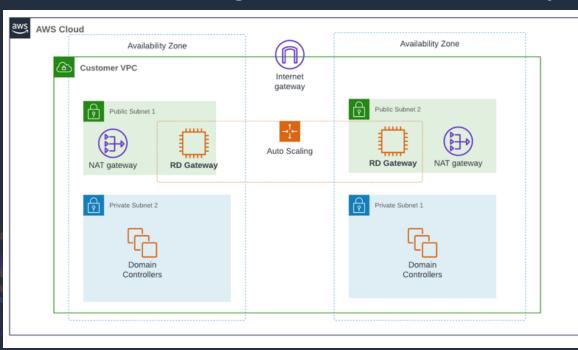
- Extend existing on-premise Domain/Forest to AWS.
- Integrated environment on-prem and AWS.
- Requirement of Domain Admin privilege.
- Utilization of existing users, groups, OU and GPOs

#### We can choose AWS Managed AD when

- Isolated Domain for AWS resources.
- Minimize operational over-head of AD Infrastructure.
- Delegate cloud AD Management to separate team while maintaining control of users identity.
- Requirement of AWS-native authentication.



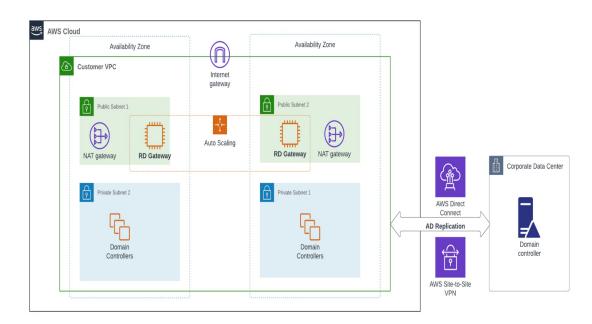
# Self Managed Active Directory







#### Self Managed Active Directory Extended to AWS

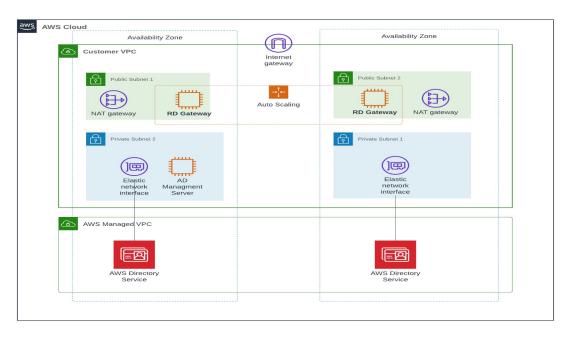


Working on updates 0% complete. Don't turn off your PC. This will take a while.

Your PC will restart several times.



# AWS Managed Active Directory





- Powered by Windows 2019 and operates at Windows 2012 R2 Forest and Domain functional level.
- Minimum two subnets and both in different Availability Zone.
- > VPC with default hardware tenancy.
- AWS Managed Microsoft AD can't be created in a VPC using addresses in the 198.18.0.0/15 address space.
- Single directory sharing with other AWS accounts within same or outside organization.

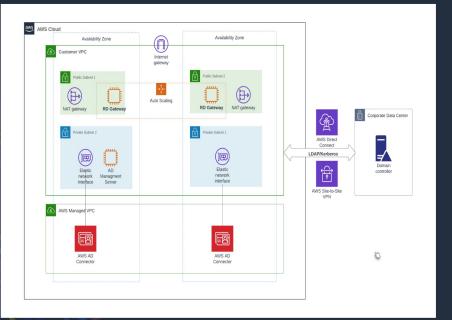


# AWS Managed AD Trust On-Premises AD





# AWS AD Connector - On-Premises AD

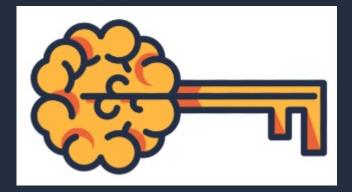


- Directory gateway redirect to On Prem AD
- No caching in cloud
- Two sizes small and large
- > AD Connectors works only with AWS applications.
- > No support for AD Transitive trusts.
- AD Connectors cannot be shared with other AWS accounts and needs 1 to 1 relationship with on-prem



#### Key Takeaways – AD in AWS

- 1. Seamless Hybrid Identity Management
- 2. Scalability and Availability
- 3. Security and Compliance







#### Let's Network! Find me on Linkedin @ https://www.linkedin.com/in/ramstack/



#### References



For more information on Active Directory DS in AWS, please refer the following links

- https://aws.amazon.com/solutions/partners/active-directory-ds/
- https://www.youtube.com/watch?v=j1Fhaeh\_MFA

